

AMENDMENTS TO THE SPECIFICATION:

Please amend the paragraph beginning on page 22, line 15, as follows:

In a case in which the Applied voltage V_p further rises to cross the limiting current region, the components other than oxygen contained in the exhaust gas greatly affect the variation of the element current I_p . Concretely, because the ~~deposition~~decomposition voltage of water (H_2O) contained in the exhaust gas varies according to the air-fuel ratio and the degrees of decomposition easiness of the unburned components (HC, CO, H_2 , and others) differ from each other, they have influence on the variation of the element current I_p . Therefore, the voltage point at the end of the limiting current region varies according to air-fuel ratio and, consequently, the width of the limiting current region stands at a different value for each air-fuel ratio.